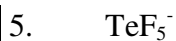
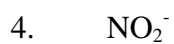
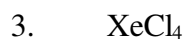















Draw Lewis structures for the following molecules, assign them to an orbital and molecular shape, predict bond angles, and predict molecular polarity.



Features of Molecular Geometries

Steric Number	Orbital Orientation	Hybridization	Lone Pairs	Molecular Shape	Bond Angles*	Picture
2	Linear	sp	0	Linear	180	
3	Trigonal plane	sp^2	0	Trigonal plane	120	
			1	Bent	<120	
4	Tetrahedron	sp^3	0	Tetrahedron	109.5	
			1	Trigonal pyramid	<109.5	
			2	Bent	<109.5	
5	Trigonal bipyramid	sp^3d	0	Trigonal bipyramid	120, 90	
			1	Seesaw	<120, <90	
			2	T-shape	<90	
			3	Linear	180	
6	Octahedron	sp^3d^2	0	Octahedron	90	
			1	Square pyramid	<90	
			2	Square plane	90	

*In degrees.

Pauling's Electronegativity Scale

from Olmstead and Williams

